



# National Tsunami Hazards Mitigation Program (NTHMP)

## Rules of Procedure

July 2015 Revision

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The NTHMP is designed to reduce the impact of tsunamis through hazard assessment, warning guidance, and mitigation. These components of the NTHMP are achieved by a strong and active partnership between Federal and State agencies (here within, the term “State” or “State Members” refers to all 28 State, Commonwealth and Territorial NTHMP Members (Appendix A)). This partnership enables all levels of government to prepare for a damaging tsunami in coordination with each other providing the greatest benefit to tax payers. The Program’s ultimate goal is saving lives of all U.S. residents and visitors to our nation’s coastlines, and reducing damage to property and the economy during a tsunami.

## NTHMP STRUCTURE

### Membership

The National Tsunami Hazard Mitigation Program, a partnership between Federal and State agency representatives, is the instrument through which the National Weather Service (NWS) shall implement “a community-based tsunami hazard mitigation program to improve tsunami preparedness of at-risk areas in the United States and its territories.” – *P.L. 109-424* (Appendix B).

The NTHMP partnership includes: The National Oceanic and Atmospheric Administration (NOAA), the United States Geological Survey (USGS), the Federal Emergency Management Agency (FEMA), and all 28 U.S. coastal States, Territories, and Commonwealths.

## **GOVERNANCE – COORDINATING COMMITTEE**

### **Authority**

The NTHMP was formed in 1995 by Congressional action which directed the National Oceanic and Atmospheric Administration (NOAA) to form and lead a Federal/State working group. Since its inception, the NTHMP has built upon the strengths of its partnership to provide the greatest benefit to tax payers with the goal of protecting the lives of all U.S. residents and visitors to our nation's coastlines and reducing damage to property and the economy from tsunami hazards.

The NTHMP Coordinating Committee (CC) conducts its business in the model provided in Section 5 of PL 109-424. To fulfill its specific responsibilities, the Coordinating Committee shall:

- (1) Recommend how funds appropriated for carrying out the program under Section 5 will be allocated;
- (2) Include representatives from Federal, State, local and tribal governments;
- (3) Provide recommendations to the National Weather Service on how to improve the TsunamiReady® program, particularly on ways to make communities more tsunami resilient through the use of inundation maps and other mitigation practices; and
- (4) Ensure that all components of the program are integrated with ongoing hazard warning and risk management activities, emergency response plans, and mitigation programs in affected areas, including integrating information to assist in tsunami evacuation route planning.

### **Coordinating Committee Membership**

Coordinating Committee membership will be comprised of two representatives from:

- NOAA (excluding Chair position)
- FEMA
- USGS
- The NOAA NTHMP Program Administrator is an ex-officio, non-voting member of the Coordinating Committee.

Also included in the Coordinating Committee will be one Emergency Management and one Technical representative from:

- Alaska
- American Samoa
- California
- Commonwealth of the Northern Mariana Islands
- Guam
- Hawai'i
- Oregon
- Puerto Rico
- Washington
- U.S. Virgin Islands
- U.S. East Coast States
- U.S. Gulf Coast States

Each member organization (i.e., Federal, State, Commonwealth, and Territorial Government) will be responsible for designating their official representatives. Each Coordinating Committee member officially designated by the member organization may designate one alternate to participate on their behalf in the event they are unable to execute their duties. The Coordinating Committee member shall be responsible for informing the NTHMP Administrator of the alternate's name in advance of the meeting(s) in which the alternate will attend on behalf of the official representative. Invitational travel will only be provided to the officially designated Coordinating Committee member, unless specifically authorized in advance by the NTHMP Administrator. Requests will be evaluated on a case-by-case basis and several factors, including available funding.

The NTHMP Chair will appoint the emergency management and science representatives for the East Coast and Gulf Coast states. A majority vote of the Coordinating Committee is required to affirm these appointments. A list of current representatives will be posted on the NTHMP Website ([nws.weather.gov/nthmp/](http://nws.weather.gov/nthmp/)).

## **Officers**

1. The NTHMP Coordinating Committee shall vote in even years to recommend a NOAA Chairperson to the NWS Director at the NTHMP Annual Meeting. The NWS has the final authority to appoint the NTHMP Chair.
2. The NTHMP Coordinating Committee also may recommend a co-Chair, from a State, to assist with administrative tasks and facilitate communication among Federal and State partners.
3. The NOAA Chairperson shall preside over the meetings of the NTHMP and NTHMP Coordinating Committee and shall exercise all powers usually incident to the office.
4. The NOAA Chairperson does not have voting rights unless a Coordinating Committee vote ends in a tie. In the event of a tie, the NOAA Chairperson will cast the deciding vote.
5. The NOAA Chairperson, or their designated appointee, shall attend meetings at which important NTHMP recommendations are presented and shall speak on behalf of the NTHMP.
6. A staff member designated by NOAA shall serve as Program Administrator to the NTHMP. The Program Administrator shall keep a record of all meetings of the NTHMP and shall keep such files as may be required. All meeting minutes will be posted to the NTHMP website (<http://nws.weather.gov/nthmp/>). Meeting minutes for closed Coordinating Committee meetings shall consist of meeting outcomes, decisions, and policy statements and not individual member comments.

## **MEETINGS**

The NTHMP will hold one meeting per year known as the Annual NTHMP Meeting. Meetings shall be open to the public, except at the discretion of the NTHMP Chair or with a vote of at least 60% of the members of the Coordinating Committee if the discussion will involve sensitive matters. Additional teleconference calls, Coordinating Committee meetings, and subcommittee meetings may be convened as necessary, provided at least two weeks notice of any special meeting is given to each member at his/her established business email account. Agendas for additional teleconferences or other meetings throughout the year shall be provided in a timely way as needed by the NTHMP Chair or the appropriate subcommittee co-Chair. The NTHMP Program Administrator may distribute meeting agendas once approved by the appropriate Chair. If necessary, to ensure a constructive and democratic process, meeting business shall be conducted following "Roberts Rules of Order".

## **Annual NTHMP Meeting**

1. The NTHMP will hold its annual meeting during January or February of each year for the purpose of addressing NTHMP business, convening subcommittee meetings, reviewing NTHMP member project accomplishments, presenting new and ongoing grant Applications (provided NTHMP grants are available), and reviewing the activities of the NTHMP. Due to budget uncertainties, the Annual Meeting may be moved to a different time of year.
2. The NTHMP Chair (via the NTHMP Program Administrator) will submit a draft agenda one month prior to the scheduled date of the Annual Meeting. Through correspondence with the Chair through the Program Administrator, the Coordinating Committee may provide input, comments, and recommend topics to add to the agenda up to two weeks before the meeting.
3. The revised, final Annual Meeting agenda shall be submitted to the Coordinating Committee by the Chair (via the NTHMP Program Administrator) at least five working days before the meeting date.
4. Time will be allotted for each group funded and/or that participates with the NTHMP to provide a brief report on accomplishments reached during the last fiscal year. All NTHMP-funded reports will be tied to outcomes, strategies, measures, and/or milestones in the NTHMP Strategic Plan.
5. Time will be allotted for groups requesting NTHMP funding for the current fiscal year to give a short summary of proposed project(s).
6. The Coordinating Committee may hold a closed session during part of the meeting to formulate recommendations on the allocation of NTHMP grant funds if Congress has appropriated funds specifically for that purpose (see discussion under Budget Approval and Voting Procedures section).
7. The Coordinating Committee will meet in closed session to formulate out-year priorities for the long-term vision of the program, which take into account recommendations of individual subcommittees and NTHMP members. The Coordinating Committee also will review the Strategic Plan measures and milestones to ensure progress is on track.
8. Annual Meetings also may include work sessions for NTHMP subcommittees.
9. Items not included on the advance agenda will be discussed under new business or appended to the agenda of the next meeting.

## **Voting Procedures**

Voting rights are distributed as follows: one vote each for Hawaii, Alaska, Oregon, Washington, California, Puerto Rico, USVI, American Samoa, Commonwealth of the Northern Mariana Islands, Guam, U.S. East Coast States, U.S. Gulf Coast states; and two each from NOAA, FEMA, and USGS. A simple majority will determine the Coordinating Committee's decision. The type of vote (ballot, voice, hand, etc.) is left to the Chair's discretion. In the event of a tie, the NOAA Chair will cast the deciding vote.

The only Federal Government employees who have a vote on the Coordinating Committee are the Chair (in the event of a tie) and the two appointed representatives from NOAA, FEMA, and USGS. If a Federal Employee is appointed by a State, Territory, or Commonwealth to serve as one of its representatives on the Coordinating Committee, that person must abstain from voting.

A quorum, consisting of a majority of state representatives (minimum of seven state/territory representatives) and a majority of federal agency representatives (minimum of four federal agency representatives), must be satisfied in order to hold a vote on any NTHMP decision. NTHMP voting members must be physically present at an in-person meeting (on the phone during a teleconference) to vote. Proxies are not allowed; however, an alternate member (as defined in the Membership section of the Rules of Procedure) may attend Coordinating Committee meetings. The state/territory decides who has the vote on behalf of the official representative in their absence.

### **NTHMP Grant Program**

NTHMP Grant Program is the mechanism used to fund NTHMP tsunami mitigation projects. Types of projects that qualify for funding are provided in annual NTHMP Grant Guidance provided by NOAA/National Weather Service. All NTHMP state, territory, and university partners who have members appointed to serve on the NTHMP Coordinating Committee are eligible to submit applications for new funding to the NTHMP Grant Program. State Members' grant applications are submitted through Grants.gov. Grants for mitigation projects specific to localities within a state, commonwealth, or territory will be funded through the state NTHMP State Member applications and may not be submitted directly to NOAA. Grants may have a performance period for up to two years.

*Note: Approved funding for the NTHMP subcommittees and NOAA projects will be executed within NOAA. Funding for Federal Agencies (non-NOAA) will be transferred via the Federal Interagency Transfer process and applicable Federal transfer authorities.*

The general timeline and procedures for grant applications will be provided in the annual NTHMP Grant Guidance. NOAA/NWS will provide guidance by November 1 each year to all NTHMP members pertaining to grant pre-application content and format.

### **Grant Reporting**

Each grant recipient receiving funds through the NTHMP Grant Program will provide a brief report at the NTHMP Annual Meeting that includes their accomplishments during the last fiscal year. All reports will be coordinated with the appropriate subcommittee and tied to the outcomes, strategies, measures and/or milestones listed in the NTHMP Strategic Plan. Written reports to NOAA are required as part of the Grants Online process. Submission of these reports will be timed such that the report on the previous year's activities will be available to Coordinating Committee members and Subcommittee Chairs prior to the Annual Meeting and the Grant Panel's deliberations on awarding the next year's grants.

Recipients of grant funds are required to submit semi-annual grant progress reports (using the NTHMP Semi-Annual Report template provided by the NTHMP Program Administrator or designee) and quarterly financial expense reports via Grants Online. NOAA's Grant system will notify grant recipients when these reports are due. Failure to submit these reports is a violation of the terms and

conditions of grant awards and can result in:

- NOAA Acquisition and Grants Office (AGO) freezing future funding on current awards
- NOAA AGO not awarding future NTHMP grant funding requests (new grant awards)
- NOAA AGO not releasing funding for other non-NTHMP grant awards to the agency/institution who is delinquent on a required report for the NTHMP grant.

To avoid being delinquent on required semi-annual grant progress reports and quarterly financial grant expenses reports it is the responsibility of NTHMP grant recipients to ensure the correct person within their organization is listed on the grant award to receive on-line notices of report deadlines. This can be updated on-line through Grants Online.

## SUBCOMMITTEES

A subcommittee structure is used to meet the expanded NTHMP and strengthened US tsunami warning system requirements as well as to oversee implementation of the NTHMP Strategic Plan. Each subcommittee must have at least one co-Chair who is a member of the Coordinating Committee. The Coordinating Committee approves the Terms of Reference for each subcommittee. The following committees are consistent with PL 109-424 as well as other authorities and findings of the GAO and NTHMP 5-year review:

- 1. Warning Coordination Subcommittee** – co-chaired by the Directors of NOAA’s National Weather Service’s (NWS) two Tsunami Warning Centers (TWC) and a state member;
- 2. Mitigation and Education Subcommittee** – co-chaired by a NOAA representative, a FEMA representative, and a state member;
- 3. Mapping and Modeling Subcommittee** - co-chaired by a NOAA representative and a state representative.

### Subcommittee Terms of Reference:

*Note about Terms of Reference: NTHMP Subcommittees may update their respective Terms of Reference at their discretion and with approval by the NTHMP Coordinating Committee. If updated Terms of Reference are adopted, that Terms of Reference document supersedes the related section below.*

### Warning Coordination Subcommittee (WCS)

Introduction: In 2005, the NTHMP West Coast Tsunami Warning Coordination Subcommittee was formed to provide a mechanism for tsunami warning system participants along the U.S. West Coast, Alaska, and British Columbia coastal regions to provide input on warning products and dissemination to the West Coast/Alaska Tsunami Warning Center. As the NTHMP expanded to all U.S coastal states, commonwealths and territories, the subcommittee membership expanded to include these other areas and the scope expanded correspondingly. During the November 1, 2007 NTHMP meeting, the NTHMP subcommittee structure was re-aligned and this subcommittee was officially broadened to include all coastal states and territories with the purpose and authority given below.

Purpose: The WCS will help improve U.S. tsunami warning system effectiveness by providing NTHMP partners a means to exchange experiences and discuss improvements related to operational product

dissemination. WCS members will formulate and agree to actions and recommendations regarding components of the tsunami warning system such as warning center products, warning procedures, message dissemination, system exercises, and Emergency Alert System activation. The WCS will execute strategies as assigned in the NTHMP Strategic Plan, and activities as assigned by the NTHMP Coordinating Committee.

**Authority:** The WCS will be considered the primary mechanism for NTHMP partner input to NOAA's operational tsunami warning system. As such, its actions and recommendations, achieved by consensus of the members, will be considered to represent the collective will of those partners. Major changes proposed through the Subcommittee will be vetted through the NWS service change process and the NWS Directive and Instruction system as appropriate. Minor changes proposed and approved through the Subcommittee will be implemented by the Tsunami Warning Centers.

**Membership:** The WCS will be composed of designees from the NTHMP partners who can represent the operational tsunami warning program interests of those partners as well as NWS tsunami warning system specialists. These include:

- Emergency management representatives from the 12 NTHMP Regions
- NWS TWC Directors
- NWS Regional Tsunami Program leaders (Eastern, Southern, Western, Pacific, and Alaska Regions)
- Caribbean Tsunami Warning Program (CTWP) Manager
- International Tsunami Information Center (ITIC) Director
- US Navy – Joint Typhoon Warning Center representative
- US Coast Guard – Atlantic and Pacific Region representatives

Outside experts and other stakeholders may be invited to participate in WCS discussions but they will not participate in any consensus recommendations of this subcommittee. These might include:

- NWS Warning Coordination Meteorologists (WCMs)
- Other NTHMP state/territory emergency management representatives
- FEMA Representatives
- USGS Representatives
- NOAA Tsunami Program Leaders
- Canadian Tsunami Program Representatives
- Social Science Experts

**Chairpersons:** Chairpersons are approved by a majority of the NTHMP Coordinating Committee, and shall include both TWC directors and a representative from one of the member states. Chairpersons can be changed during any CC meeting.

**Communications:** Meetings will normally be held annually in conjunction with the Annual NTHMP Meeting. Between meetings, communication will take place primarily by email and conference calls. Notes and Action Items will be maintained by the co-Chairs and posted to the NTHMP web site. Completion of actions will be coordinated by the co-Chairs. Recommendations will be forwarded to the appropriate organizations by the co-Chairs.

## **Mitigation and Education Subcommittee (MES)**

**Introduction:** In 1996, the NTHMP Mitigation Subcommittee was formed to provide a mechanism for the Federal and State Emergency Management and Geo-science participants to address ongoing emergency management issues of mitigation, preparedness and response and recovery with regard to tsunami risk to the impacted FEMA Regions, Coastal States and Local jurisdictions. Mitigation is an integrated set of processes and actions taken to reduce or eliminate risk to people and their property, and to improve community resilience to tsunamis as well as other natural and man-made hazards. The outcomes of mitigation efforts are increased understanding of the tsunami hazard; tools to mitigate the risk; dissemination and exchange of risk information; and institutionalization of tsunami planning. One important tool used by emergency managers and urban planners is a tsunami inundation study that can guide evacuation planning, establishment of evacuation routes, and location of critical and essential infrastructure. One key outcome is improved response to tsunami warning information. Today, the Mitigation Subcommittee continues as the Mitigation and Education Subcommittee (MES). MES members work closely with the other subcommittees on such important cross-cutting issues.

The Subcommittee's role is to analyze and prioritize State and Local needs, address them through products and activities, and then disseminate and share these products with other at-risk communities. The first product was the Strategic Implementation Plan for Mitigation Projects that listed, prioritized and then led to development of relevant projects and initiatives to address those needs, and to widely disseminate the products to the original West Coast, Alaska Coast and Hawaiian Coast jurisdictions funded under the NTHMP. As the NTHMP expanded to all U.S. coastal states, territories, and commonwealths, the subcommittee membership expanded to include these other areas and the scope expanded correspondingly. The membership also expanded to include the TsunamiReady® Program component. During the November 1, 2007 NTHMP meeting, the NTHMP subcommittee structure was re-aligned and this subcommittee was officially broadened to include all coastal states, territories, and commonwealths with the purpose and authority given below.

**Purpose:** The Mitigation and Education Subcommittee (MES) will help improve tsunami mitigation, education, preparedness, response and recovery effectiveness by providing NTHMP partners a means to integrate and share their experience with existing State and Federal programs and apply that to tsunami risk reduction activities. M&E Subcommittee members will use this experience to develop and agree to actions and recommendations relating to products and activities that will provide increased education, outreach, and training to the public and other stakeholders.

Some of these activities include but are not limited to: promoting community education networks and programs to ensure readiness including development of comprehensive coastal risk and vulnerability assessment training and decision support tools, implementation of technical training and public education programs and providing recognition of prepared communities; integration of tsunami activities into ongoing all-hazard warning and risk management activities, response plans, and mitigation programs; promoting adoption of tsunami warning and mitigation measures by Federal, State, Tribal, and local governments and nongovernmental entities, including education programs to discourage development in high-risk areas; developing and disseminating Best Practices in mitigation and preparedness; participating in meetings, conferences, workshops, and special events; supporting requested international tsunami efforts through the United Nations' Intergovernmental Oceanographic Commission (UNESCO/IOC) and the International Tsunami Information Center (ITIC); improving

tsunami education and training to support tsunami resilient behavior; serving as a source educational expertise to the other subcommittees; fielding requirements from outside the NTHMP, analyzing and presenting them to the NTHMP for discussion and adjudication. Other activities to be performed by this subcommittee include but are not limited to developing educational guidelines that support the Tsunami Warning and Education Act; developing and offering educational programs that can be used by new member States of NTHMP; developing evaluation tools to monitor the effectiveness of educational programs of NTHMP; and developing research requirements.

**Authority:** The MES will be considered the primary mechanism for NTHMP partner input to the mitigation and education component of the NTHMP.

**MES Executive Committee:** In 2008, the MES Executive Committee (MES-EC) was formed as the decision-making body of the MES. In 2013, the MES-EC membership was expanded. The MES-EC's primary role is to address action items contained within the NTHMP Strategic Plan and assigned by the NTHMP-Coordinating Committee. In addition, the MES-EC will develop and implement additional activities and initiatives that will result in improved U.S. tsunami mitigation and education of those threatened by tsunami.

**MES-EC Membership:** The MES-EC membership will consist of an identified representative from each State and/or Agency listed below. *This representative must be identified, in writing, to the MES chairpersons when a new representative is identified.*

FEMA Co-Chair

NOAA Co-Chair

State Co-chair (Emergency Management Agency)

State of Alaska (Alaska Division of Homeland Security & Emergency Management)

State of Washington (Washington Emergency Management Division)

State of Oregon (Oregon Emergency Management)

State of California (California Office of Emergency Services)

State of Hawaii (Hawaii Civil Defense)

Puerto Rico (Emergency Management Agency)

U.S. Virgin Islands (Territorial Emergency Management Agency)

Guam (Department of Homeland Security)

American Samoa (Department of Homeland Security)

Commonwealth of the Northern Mariana Islands

East Coast States (appointed emergency management representative)

Gulf Coast States (State Emergency Management Agency)

NTHMP Program Administrator (ex-officio)

**MES-EC Voting Procedures:** Each MES-EC Member has the authority to cast one (1) vote during MES-EC decisions. MES-EC decisions will be determined by a simple majority. In the event of a tie-vote, the MES chairpersons will collectively determine the final decision of the MES-EC through a consensus process.

MES co-chairs will notify all MES-EC members when a vote is to occur in a timely manner. In order to vote on an MES-EC decision, an MES-EC member must be present in person, on the conference call/webinar or via email. If the meeting is in person and the MES-EC member is unable to be present in

person or via phone/webinar he or she may have an identified proxy present to represent the views of their Agency. The proxy must be identified in writing to the MES chairpersons prior to discussions of the issue.

If an issue is to be voted on by e-mail, a digital copy of the proposed issue is e-mailed to every member with the words "yes" and "no" printed underneath the issue. The vote will then be returned to the MES chairpersons via e-mail.

**Chairpersons:** Chairpersons are approved by a majority of the NTHMP Coordinating Committee, and shall include a FEMA, NOAA, and State representative. Chairpersons can be changed during any CC meeting. At least one MES Co-Chair will be a member of the NTHMP-CC. The MES –EC will vote by a simple majority to recommend a new State, FEMA or NOAA Co-Chair to the NTHMP-CC. The NTHMP-CC will make the final decision on the election of the new FEMA or NOAA Co-Chair based on their Voting Procedures. Chairpersons for the MES will be determined every 2 years.

The MES-EC may charter working groups from the full MES membership to examine tsunami mitigation and education issues and other items as needed by the MES-EC. These working groups will submit reports to the MES with recommendations as appropriate for the MES-EC to consider.

Outside experts and other stakeholders may be invited to participate in the MES-EC, but they will not participate in any consensus recommendations of this subcommittee. Outside participation in the MES is encouraged and can include representatives from various Federal, State and International Agencies, such as:

- National Weather Service (NWS) Warning Coordination Meteorologists
- National and Regional Tsunami Program Leaders
- NOS Office for Coastal Management
- NWS Tsunami Warning Center (TWC) Directors and/or designees
- International Tsunami Information Center (ITIC)
- Caribbean Tsunami Warning Program (CTWP)
  
- US Geological Service (USGS) Representatives
- Regional Seismic Networks
- National Earthquake Information Center
  
- Federal Emergency Management Agency (FEMA) Response & Recovery
  - Preparedness
  - Hazard Mitigation
  - RiskMap
  
- National Science Foundation (NSF) Representatives
- International Stakeholders & Partners
- State Geological Agencies
- American Red Cross
- American Society of Civil Engineers (ASCE)
- Social Science Stakeholders (Natural Hazards Center, UCLA, etc.)

- Regional/State Tsunami Workgroups

MES Meetings and Workshops: The MES chairpersons will determine the additional subject matter experts to be invited to meetings and workshops based on agenda items and input from other MES-EC members and MES participants. Feedback from MES meetings and workshops will be provided to all members of the MES via email and posted on the NTHMP website.

Communications: Meetings of the full MES will normally be held annually in conjunction with NTHMP meetings. Between meetings, communication will occur primarily through email and conference calls, unless a meeting is necessary. Notes and action Items will be maintained by Chairpersons and posted to the NTHMP web site. Completion of actions will be coordinated by the Chairpersons. Recommendations will be forwarded to the appropriate organizations by the Chairpersons.

### **Mapping and Modeling Subcommittee (MMS):**

Introduction: The National Tsunami Hazard Mitigation Program's (NTHMP) Mapping and Modeling Subcommittee (MMS) brings together expertise on a variety of tsunami and coastal mapping, modeling, and hazard issues. The MMS acts in an advisory capacity to the NTHMP Coordinating Committee on tsunami hazard analysis, modeling and mapping issues including: tsunami hazard and source identification, strategic guidance and standards for modeling and mapping priorities, and Digital Elevation Model (DEM) development priorities. The MMS identifies and applies educational opportunities related to modeling and mapping products as well as hazard mitigation deficiencies that can be addressed by further mapping and modeling research, and utilizes opportunities to integrate modeling and mapping efforts into NTHMP mitigation and risk assessment activities. The MMS vision is to be the authoritative source of scientific and technical guidance for tsunami modeling and mapping projects done by the NTHMP.

#### **Purpose:**

- To provide technical guidance and recommendations to the NTHMP Coordinating Committee on matters related to tsunami hazard analysis, modeling, and mapping.
- To execute tasks related to tsunami hazard and inundation mapping and modeling as assigned by the NTHMP Coordinating Committee.
- To operate in an environment respecting the core values of honesty, integrity, trust, and diligence with a focus on service to the states, territories, commonwealths, and the nation, across state/territory/commonwealth boundaries, providing value to stakeholders within the mandate of the NTHMP while remaining objective, reasonable, and respectful.

By achieving this purpose, we create an opportunity to be an effective body in predicting the potential damaging effects of major tsunami events and providing warning and mitigation decision makers with life-safety tools.

#### **Authority:**

The MMS Subcommittee will be considered the primary mechanism for NTHMP partner input to the mapping, modeling, and hazard components of the NTHMP. The subcommittee's actions and recommendations will be achieved by consensus, and considered to represent the collective will of those partners. This authority is established within the context of PL 109-424 and subject to the provisions of

Sections 4, 5 and 6 of the Act, most particularly Section 5(c1).

Membership:

The MMS Subcommittee is comprised of 12 state, territory, and commonwealth representatives, one from each of the regions of the NTHMP Coordinating Committee, one representative from the USGS, and two NOAA representatives, one from a Tsunami Warning Center. The current official membership is maintained on the [NTHMP website](#). Outside experts and other stakeholders may be invited to participate in MMS discussions or work groups but their agreement is not required for any formal consensus. These might include:

- University, NOAA, or other modeling and mapping experts
- Social Science Experts
- U.S. Geological Survey representatives
- Other

State, territory, and commonwealth membership is the Technical Representative from each of the NTHMP regions of the Coordinating Committee: Alaska, American Samoa, California, Commonwealth of the Northern Mariana Islands, East Coast States, Guam, Gulf Coast States, Hawaii, Puerto Rico, Oregon, the U.S. Virgin Islands, and Washington.

Chairpersons: The subcommittee will have two chairpersons selected from the body of the MMS and approved by a majority vote of the NTHMP Coordinating Committee at the annual NTHMP meeting. One chairperson must be a representative from NOAA and the other a representative from one of the member states, territories, or commonwealths. Chairpersons will serve for two years with rotation staggered to maintain continuity in leadership, although subcommittee members can recommend yearly extensions as needed.

Communications: Meetings will normally be held bi-annually, once in conjunction with the Annual NTHMP Meeting (typically in winter), and once as a joint MES/MMS Subcommittee Meeting and Workshop (typically in summer). Between meetings, communication will take place primarily by email and conference calls, although meetings for specific subcommittees or task teams are encouraged. MMS Meeting notes and actions items will be summarized by the Chairpersons, and circulated to its members and/or posted to the NTHMP web site. Strategies for the completion of action items will be coordinated by the Chairpersons. Recommendations from MMS will be forwarded to the appropriate organizations by the Chairpersons.

## **CHANGE OF RULES**

The Rules of Procedure may be amended at any meeting or teleconference of the NTHMP Coordinating Committee by a majority vote of the membership of the NTHMP Coordinating Committee.

Adopted: April, 2008

Amended: November, 2008

Amended: August, 2009

Amended: September 2014

Amended: July 2015

## **Appendix A – Listing of Eligible NTHMP Member States, Territories, Commonwealths and US Agencies**

### **The Member States, Territories, and Commonwealths**

Alabama  
Alaska  
American Samoa  
California  
Commonwealth of the Northern Mariana Islands  
Connecticut  
Delaware  
Florida  
Georgia  
Guam  
Hawaii  
Louisiana  
Maine  
Maryland  
Massachusetts  
Mississippi  
New Hampshire  
New Jersey  
New York  
North Carolina  
Oregon  
Puerto Rico  
Rhode Island  
South Carolina  
Washington  
Texas  
Virginia  
U.S. Virgin Islands

### **The Agency Members**

Department of Commerce's NOAA  
Department of Interior's USGS  
Department of Homeland Security's FEMA and Coast Guard  
Department of Defense

## Appendix B – NTHMP Structure

The following, taken directly from PL 109-424, Section 5, identifies the requirements for the structure of the NTHMP follows that pattern

### **SEC. 5. NATIONAL TSUNAMI HAZARD MITIGATION PROGRAM.**

*(c) PROGRAM COMPONENTS.—The program under this section shall—*

*(1) use inundation models that meet a standard of accuracy defined by the Administration to improve the quality and extent of inundation mapping, including assessment of vulnerable inner coastal and nearshore areas, in a coordinated and standardized fashion to maximize resources and the utility of data collected;*

*(2) promote and improve community outreach and education networks and programs to ensure community readiness, including the development of comprehensive coastal risk and vulnerability assessment training and decision support tools, implementation of technical training and public education programs, and providing for certification of prepared communities;*

*(3) integrate tsunami preparedness and mitigation programs into ongoing hazard warning and risk management activities, emergency response plans, and mitigation programs in affected areas, including integrating information to assist in tsunami evacuation route planning;*

*(4) promote the adoption of tsunami warning and mitigation measures by Federal, State, tribal, and local governments and nongovernmental entities, including educational programs to discourage development in high-risk areas; and*

*(5) provide for periodic external review of the program.*

*(d) SAVINGS CLAUSE.—Nothing in this section shall be construed to require a change in the chair of any existing tsunami hazard mitigation program subcommittee.*

In support of the Tsunami Warning and Education Act (P.L. 109-424), the NTHMP primary outcomes are:

- ❖ Reduction of loss of life and property damage from tsunamis
- ❖ Successful execution of NTHMP tsunami mapping, modeling, mitigation, planning and education efforts
- ❖ Tsunami inundation maps that support informed decision making in tsunami-threatened communities
- ❖ Tsunami evacuation maps that support effective preparedness and response
- ❖ A culture of tsunami preparedness and response
- ❖ Establishment of more tsunami resilient communities
- ❖ Effective and reliable warning dissemination to people at risk
- ❖ Understandable and effective Tsunami Warning Center products

Tsunami mitigation is applicable beyond tsunamis and is integral to the nation's overall effort to reduce coastal losses and improve community resilience. The mitigation capability takes a multi-hazards physical, commercial and ecological approach that responds to socio-economic and disaster management priorities.

## **Appendix C – NTHMP Fundable Mitigation Activities**

## **Appendix D– Description of NTHMP Grant Program Distribution Process**

**The content of these appendices are included now in NTHMP Grant Guidance which is an administrative function of the grant provider: NOAA/NWS, not the NTHMP.**

## **Appendix E – Acronyms**

AGO – NOAA Acquisition and Grants Office  
CC – Coordinating Committee  
CNMI – Commonwealth of the Northern Mariana Islands  
DEM - Digital Elevation Model  
DOC – Department of Commerce  
FEMA – Federal Emergency Management Agency  
GAO – The United States Government Accountability Office  
IOC - Intergovernmental Oceanographic Commission  
ITIC – International Tsunami Information Center  
NOAA – National Oceanic and Atmospheric Administration  
MMS – Mapping and Modeling Subcommittee  
MES – Mitigation and Education Subcommittee  
NTHMP – National Tsunami Hazard Mitigation Program  
NWS – NOAA’s National Weather Service  
PL 109-424 – The Tsunami Warning and Education Act of 2006  
POC – Point of Contact  
TWC - US Tsunami Warning Center  
USGS – United States Geological Survey  
USVI – United States Virgin Islands  
WCM - Warning Coordination Meteorologist  
WCS – Warning Coordination Subcommittee